



Annual Report 2017

Brussels, May 2018



Nutrition Tiers Monde adhère au Code éthique de l'AERF

Vous avez un droit à l'information.

Ceci implique que les donateurs, collaborateurs et employés sont informés au moins annuellement de l'utilisation des fonds récoltés

Voeding Derde Wereld onderschrijft de Ethische Code van de VEF.

U beschikt over een recht op informatie.

Dit houdt in dat schenkers, medewerkers en personeelsleden tenminste jaarlijks op de hoogte gebracht worden van wat met de verworven fondsen gedaan werd.

Nutrition Third World subscribes to the Ethical Fundraising Code of AERF (The Association for Ethical Fund-Raising).

You are entitled to information.

This entails that donors, collaborators and staff are informed at least annually of the use of the funds received.

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Highlights

At the meeting, held in April 2017, the members of the board decided to continue on financing about three projects for the years to come, if funds allow. In any case the decision was taken to consider one project for financing for the next period. One project studying the effect of a probiotic on recovery of malnutrition will be funded for one year so that the project can be completed successfully.

The results of NTW supported scientific studies continue to give rise to a large crop of publications in high-quality international scientific journals and to underpin policy decisions. This is mainly due to the high-quality research performed and their relevance. These studies are now part of larger international initiatives to do meta-analyses often with individual patient data.

The researchers who conducted the MISAME Study in Burkina Faso from 2012 onwards, a project funded by NTM, have now received a large grant from the Bill & Melinda Gates Foundation to continue their research. This is actually the result of the initial funding by NTM.

OVERVIEW

Introduction

All projects were closed and accounted for by the end of 2016. Revenues are dwindling and new funding opportunities have not been identified or have not revealed themselves. At the meeting of April 2017, the board decided to continue on financing projects. With the money NTM has left, we can finance about three more projects.

Expenses have been reduced to the maximum, so that we have minimal cost structure. We did have to source out the bookkeeping, which was previously done by the hosting bank Degroof, now Degroof-Petercam, which is an extra cost.

The management structure of NTW remains entirely on a voluntary basis. The only costs of the organisation are related to maintenance of the website, and miscellaneous costs mainly related to administering the registration of the organisation. There are no employment costs, neither are there fund-raising costs.

One project was identified for funding and the members of the board approved the protocol. A grant of 25.000,00 Euros will be given to Dr Laeticia Celine TOE, a medical doctor from Burkina Faso.

Support for research

Nutrition, Probiotics and gut health in rural Burkinabe infants.

Laeticia Celine TOE

Child undernutrition has been shown to be associated with a shift in gut microbiota composition, also called dysbiosis (McKay et al. 2010; Monira et al. 2011) and gut microbiota is now considered a pivotal point in the vicious circle of malnutrition-malabsorption-infection. This led to the concept of more inclusive nutritional interventions taking into account the gut health to insure better and sustainable results in the cure and prevention of malnutrition.

The present research comprises 3 work packages that aim to: (i) assess the effect of local complementary food and probiotics on the composition and metabolic functionality of gut microbiota in Burkinabe infants *in vitro*; (ii) assess the effect of a fortified LNS with a mixture of FOS (fructose Oligo Saccharides)and inulin supplementation on gut microbiota diversity and functionality and its repercussion on growth and morbidity during infancy in rural Burkina Faso and (iii) screen, extract and purify Inulin and FOS from local food items in Burkina Faso with the goal of finding a local source of prebiotic compounds.

These 3 work packages are organized as follow:

- **Work package 1** comprises 2 in vitro experiment:
 - ✓ Experiment 1 is a static batch experiment on the effect of local complementary food on gut microbiota metabolic functionality in rural Burkinabe infants with the purpose of comparing the metabolic profile of gut microbiota of Burkinabe infants submitted to local complementary food versus breast milk and Inulin.
 - ✓ Experiment 2 aims to assess the effect of prebiotic fortified LNS on gut microbiota composition and SCFA profile in moderate acute undernourished children using a dynamic gut model.
- **Work package 2** is a clinical trial on the effect of supplementation with LNS fortified with a mixture of FOS and inulin on gut microbiota diversity and functionality and its repercussion on growth and morbidity during infancy in rural Burkina Faso. The objective of this work package is to improve child microbiota range-weighted richness and metabolic functionality, growth velocity and cumulative disease load through LNS-prebiotic supplementation.
- **Work package 3** consists of Inulin extraction from local Burkinabe food items and plants, while testing a simple method of extraction and purification of fructans from the most promising candidate items.

Financing the Association

No specific fund-raising activities were organised in 2017. One project was financed in 2017, in two instalments. One in May/June 2017 and a second one in March 2018.

We received in total 1.000,00 € in donations.

NTW has continued to be affiliated with the Association for Ethical Fundraising (AERF) and all communications from the organisation carry the logo of AERF with the latter's approval.

Tax exemption

The organisation can continue to deliver tax exemption certificates for donations. The approval from the Ministry of Finance covers the period 2013 to 2018.

Governance and Administration

The Board of Directors

The new composition of the board of directors is given in Annex 3.

The Board met once at the Bank Degroof-Petercam in Brussels, on the 19th of May 2017.

The *Advisory Board* remained unchanged in 2017 and its composition is given in Annex 4.

The *Scientific Committee* remained unchanged 2017. Its composition (as of 31/12/2017) is given in Annex 5.

Management

The *General Assembly* of NTW was held on June 25th, 2017.

Promotion and communication

The website has remained unchanged.

FINANCE

General

The Association's accounts are now kept by Mr. Jean-François Steurs.

PricewaterhouseCoopers Réviseurs d'Entreprises, represented by Mr Damien Walgrave are the auditors of the Association. The Board would like to express its gratitude to PWC and their auditors for the excellent work delivered over the past years.

Tax relief certificates were sent to donors at the beginning of the year and financial reporting followed the format decided on in previous years.

Financial report

Project costs: Burkina Faso: One transfer of 12.500,00 euros was made in September 2017. With the bank transfer costs, this amounts 12.566,55 euros. For this, stock with a value of 5816,04 € were sold.

Donations. In 2017 the Association received an aggregate amount of 1.000,00 €.

Reimbursement. The "Evident" project was closed in 2016, but the final transfer of budget surplus not spent was only reimbursed on April 2017. This transfer amounts to 11.104,95 €.

Financial charges 129,23 € were booked at 31 December 2016.

Cost of services amount to 4600,42 € and include the cost of the audit and the bookkeeping.

NTM spent 1438,93 € on **miscellaneous expenses** covering, the domain name, the website, the registration costs and the contribution to Ethical fundraising.

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Annex 1: Summary Annual Accounts

The annual accounts in their full legal format and the external auditor's report (PricewaterhouseCoopers) may be obtained on request at the following address: info@nutrition-ntw.org.

A summarised version is presented below. The auditor has issued an unqualified opinion.

Balance sheet as at 31.12.2017

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Annex 1 : Summary Annual accounts

Balance sheet as at 31.12.2017			
Assets (KEUR)		Liabilities (KEUR)	
Fixed assets	0	Association's funds	43,6
Current assets	0	Earmarked funds	30,2
		Equity allocated to ongoing project	22,7
Debtors (less than one year)	10,2	Result carried forward	11,7
Short term investments	95,6	Total own funds	108,2
Cash at banks	5,7		
Charges to be deferred	0,4	Accrued charges	0,2
Total current assets	111,9	Short term debts	3,5
		Total current liabilities	3,7
Total	111,9	Total	111,9

Profit and Loss Account for the year ended 31 December 2017			
Debit (KEUR)		Credit (KEUR)	
Project related costs	2,3	Donations received	1,0
Publication, admin, IT	4,7	Revenues	1,0
Cost of goods & services	7,0		
		Financial gains	1,7
Other charges	0,5	Other income	1,7
Financial charges	0,3		
Other expenses	0,8	Negative result for the period	5,1
Total charges	7,8	Total revenues	7,8

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Annex 2: Board of Directors

Mr. Alain Philippson (Chairman)

Member of the Board of Directors, Bank Degroof-Petercam

Dr. Patrick Kolsteren (Managing Director)

MD, Professor of Nutrition at Ghent University.

Mrs. Corine du Bois (Director)

Psychologue

Dr. Denis Goldschmidt (Director)

MD, Surgeon

Dr. Isaline Greindl (Director)

MD, Public Health Specialist, Technical Adviser in charge of the AEDES programmes

Dr. Carl Lachat (Director)

Post-doctoral researcher, Food Science and nutrition, Ghent University

Mr. François Masquelin (Director)

Barrister

Mr. Léo Goldschmidt (Honorary Chairman)

Director, European Corporate Governance Institute

Mr. René Devillez (Honorary Director)

Doctor of Laws

Bank Manager, retired

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Annex 3: Advisory Board

Karel Boone

Chairman and Managing Director, Lotus Bakeries N.V.

Alain Bruyninckx

Director of companies

Pierre de Maret

Former Rector, ULB, Brussels University

Georges Jacobs

Chairman of the Board of Directors, Group Delhaize

Michel Lechat

Professor Emeritus, UCL, Catholic University of Louvain

Paul Tr n Van Tinh

Former Ambassador of the European Union

Marc Van Montagu

Professor Emeritus, Ghent University

Eric Wittouck

Chairman, ARTAL Group S.A.

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Annex 4: Scientific Committee and External Referees

Scientific Committee

Bernard Brabin

Professor of Tropical Paediatrics, Child and Reproductive Health Group, Liverpool School of Tropical Medicine
Liverpool

Bart Criel

MD, senior lecturer, Health Policy and Financing Unit, Public Health Department at the Institute of Tropical Medicine in Antwerp
Antwerp

Lena Davidsson

PhD, Head Nutrition and Health-related Environmental Studies Sector. IAEA (International Atomic Energy Agency).
Vienna

André Huyghebaert

PhD, former Head of the Department of Food Technology and Nutrition, former Dean of the Faculty of Agriculture, University of Ghent.
Ghent

Martin Kimanya

PhD, Master in Food Science and Technology.
The Nelson Mandela African Institute of Science and Technology (NM-AIST)
Arusha, Tanzania

Pierre Lefèvre

PhD, sociologist, scientific collaborator, Epidemiology and Disease Control Unit, Department of Public Health, Institute of Tropical Medicine.
Antwerp

Richard Longhurst

PhD in Economics, consulting expert with the World Health Organisation, UNICEF and FAO, formerly senior civil servant of the Commonwealth, now evaluation consultant.
London

Dr. Peter Mamiro

PhD, Food Scientist and Nutritionist, Researcher in the Department of Food Science and Nutrition, Sokoine University of Agriculture, Morogoro, Tanzania.
Morogoro

Ruth Oniang'o

PhD, nutritionist, Professor at the Jomo Kenyatta University of Agriculture and Technology, Editor-in-Chief of the African Journal of Food, Agriculture, Nutrition and Development (AJFAND), Member of the Kenyan Parliament.

Nairobi

Leonor Pacheco Santos

PhD, nutritionist, formerly Professor at the Federal University of Bahia, Member of IVACG (International Vitamin A Consultative Group), now with the Federal Ministry of Social Development and Fight against Hunger.

Brasilia

Wim Van Lerberghe

MD, PhD, Professor and formerly Head of the Department of Public Health, Institute of Tropical Medicine, Antwerp; coordinator, Health Systems Policies and Operations, World Health Organisation.

Geneva

External Referee

Prof. Dr. J. Van Camp (Belgium)

Department of Food Technology, Safety and Health, Research Group Food Chemistry and Human Nutrition. Ghent University

Ghent

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Annex 5: List of abbreviations

AEDES	Agence Européenne pour le Développement et la Santé
AERF	Association pour l’Ethique dans la Recherche de fonds
AUTHeR	Africa Unit for Trans-disciplinary Health Research
CGIAR	Consultancy Group International Research in Agricultural Research
GAIN	Global Alliance for Improved Nutrition
FAO	Food and Agriculture Organisation
IAEA	International Atomic Energy Agency
IFPRI	International Food Policy Research Institute
IMCI	Integrated Management of Childhood Illness
IRD	Institut de Recherche pour le Développement (ex ORSTOM), France
IUC	Inter University Cooperation
IVACG LCPUFA	International Vitamin A Consultative Group Long-chain polyunsaturated fatty acids
NTW	Nutrition Third World
ULB	Université Libre de Bruxelles
UNICEF	United Nations International Children's Emergency Fund
VLIR	Vlaamse Interuniversitaire Raad (Flemish Inter-University Council)
WFP	World Food Program

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Annex 6: List of NTW-funded research papers published in international peer-reviewed journals in 2017

- 1 Abessa TG, Bruckers L, Kolsteren P, Granitzer M: Developmental performance of hospitalized severely acutely malnourished under-six children in low- income setting. *BMC pediatrics* 2017;17:197.
- 2 Aryeetey R, Holdsworth M, Taljaard C, Hounkpatin WA, Colecraft E, Lachat C, Nago E, Hailu T, Kolsteren P, Verstraeten R: Evidence-informed decision making for nutrition: African experiences and way forward. *The Proceedings of the Nutrition Society* 2017;76:589-596.
- 3 Kamala A, Kimanya M, Lachat C, Jacxsens L, Haesaert G, Kolsteren P, Ortiz J, Tiisekwa B, De Meulenaer B: Risk of exposure to multiple mycotoxins from maize-based complementary foods in tanzania. *Journal of agricultural and food chemistry* 2017;65:7106-7114.
- 4 Lee AC, Kozuki N, Cousens S, Stevens GA, Blencowe H, Silveira MF, Sania A, Rosen HE, Schmiegelow C, Adair LS, Baqui AH, Barros FC, Bhutta ZA, Caulfield LE, Christian P, Clarke SE, Fawzi W, Gonzalez R, Humphrey J, Huybregts L, Kariuki S, Kolsteren P, Lusingu J, Manandhar D, Mongkolchat A, Mullany LC, Ndyomugenyi R, Nien JK, Roberfroid D, Saville N, Terlouw DJ, Tielsch JM, Victora CG, Velaphi SC, Watson-Jones D, Willey BA, Ezzati M, Lawn JE, Black RE, Katz J, Group CS-f-G-A-PBW: Estimates of burden and consequences of infants born small for gestational age in low and middle income countries with intergrowth-21(st) standard: Analysis of cherg datasets. *Bmj* 2017;358:j3677.
- 5 Nikiema L, Huybregts L, Martin-Prevel Y, Donnen P, Lanou H, Grosemans J, Offoh P, Dramaix-Wilmet M, Sondo B, Roberfroid D, Kolsteren P: Effectiveness of facility-based personalized maternal nutrition counseling in improving child growth and morbidity up to 18 months: A cluster-randomized controlled trial in rural burkina faso. *PloS one* 2017;12:e0177839.
- 6 Ochoa-Aviles A, Verstraeten R, Huybregts L, Andrade S, Van Camp J, Donoso S, Ramirez PL, Lachat C, Maes L, Kolsteren P: A school-based intervention improved dietary intake outcomes and reduced waist circumference in adolescents: A cluster randomized controlled trial. *Nutrition journal* 2017;16:79.
- 7 Smith ER, Shankar AH, Wu LS, Aboud S, Adu-Afarwuah S, Ali H, Agustina R, Arifeen S, Ashorn P, Bhutta ZA, Christian P, Devakumar D, Dewey KG, Friis H, Gomo E, Gupta P, Kaestel P, Kolsteren P, Lanou H, Maleta K, Mamadoultai bou A, Msamanga G, Osrin D, Persson LA, Ramakrishnan U, Rivera JA, Rizvi A, Sachdev HPS, Urassa W, West KP, Jr., Zagre N, Zeng L, Zhu Z, Fawzi WW, Sudfeld CR: Modifiers of the effect of maternal multiple micronutrient supplementation on stillbirth, birth outcomes, and infant mortality: A meta-analysis of individual patient data from 17 randomised trials in low-income and middle-income countries. *The Lancet Global health* 2017;5:e1090-e1100.